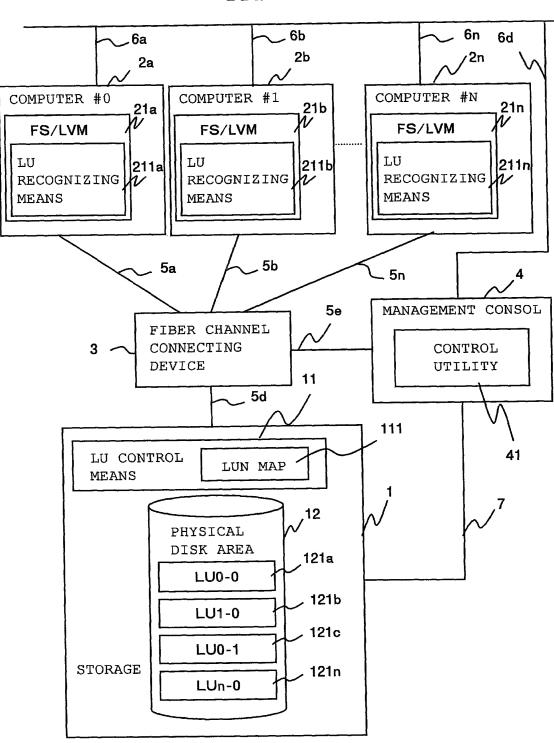
Sheet 1 of 14

FIG. 1



Robert C. Colwell, Reg. No. 27,431

(030) 320

Atty Docket No. 16869N-029300 Applicant: Yoichi Mizuno, et al. Title: Computer System...

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FIG. 2

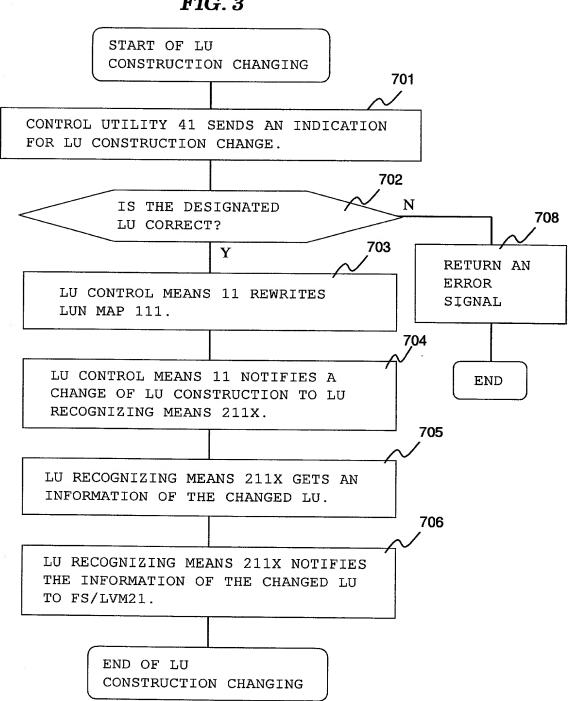
11

COMIMOMIN COMMOMN EXCLUSIVE COMMOMN EXCLUSIVE EXCLUSIVE PROPERTY S\_IDn S\_IDb S\_IDa S\_IDn S\_IDb S\_IDa SID WWNn WWWb **WWNn WWNa** WWNb **WWNa** WWN THE NUMBER 2359296 2359296 2359296 1310720 917504 1048576 OF BLOCK 0 0 TOP LBA 0 0 0 0 INNER 4 n-1 1 4 0 LUN COMBING INFORMATION 1-1 1-1 1-1 1-1 1-1 1-1 OUTER 0 0 0 ron TARGET 0 0 0 0 0 0 A NUMBER 0 0 0 **PORT** 0 0 0

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FIG. 3



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FIG. 4

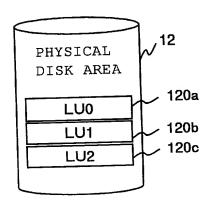
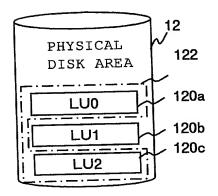


FIG. 7



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FIC 5

PROPERTY	EXCLUSIVE	EXCLUSIVE	witte	
s_m	S_IDa	S_IDb	-	•••••
WWN	WWNa	WWNb		
THE NUMBER OF BLOCK	80000	00006	70000	,
	0	0	1	********
INNER	0	1	2	
LUN COMBING INFORMATION	1-1	1-1	I	
OUTER	0	0	ı	•••••
TARGET	0	0	I	*******
PORT	0	0	1	
	THE NUMBER WWN S_ID OF BLOCK	LUN COMBING INNER TOP THE NUMBER WWN S_ID INFORMATION LUN LBA OF BLOCK S_ID 80000 WWNa S_IDa	LUN COMBING         INNER         TOP         THE NUMBER         WWN         S_ID           INFORMATION         LUN         LBA         OF BLOCK         WWN         S_ID           1-1         0         0         80000         WWN         S_IDa           1-1         1         0         90000         WWN         S_ID	LUN COMBING         INNER         TOP         THE NUMBER         WWN         S_ID           INFORMATION         LUN         LBA         OF BLOCK         WWN         S_ID           1-1         0         0         80000         WWN         S_ID           1-1         1         0         90000         WWN         S_ID           -         2         -         70000         -         -         -

Robert C. Colwell, Reg. No. 27,431

(650) 326-2400 Atty Docket No. 16869N-029300

Applicant: Yoichi Mizuno, et al. Title: Computer System...

Sheet	6 o	f	14
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Sheet 6	of	14
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OHECCE O OF 14	Sheet	6	of	14
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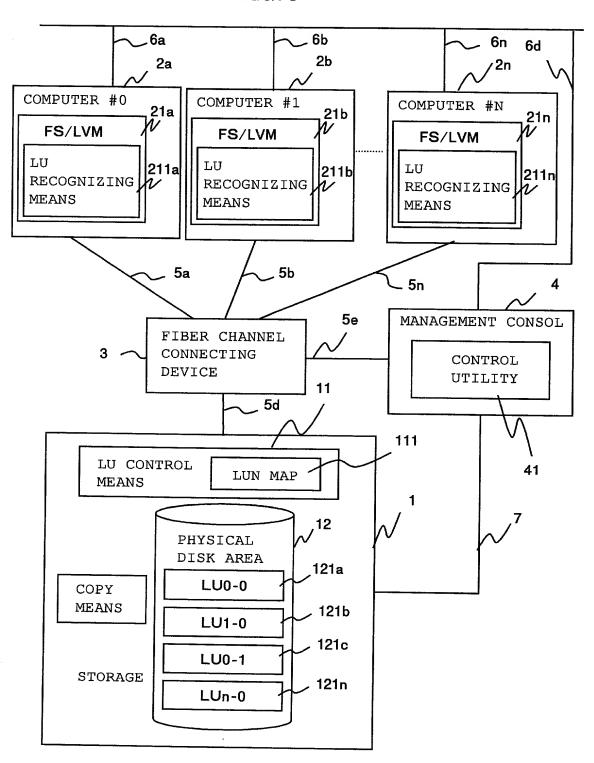
											itle:
111	PROPERTY	S IDa EXCLIISIVE	HYCT HERVE	TACECOILLE	1	·#==	•	111		PROPERTY	
	S_ID			0m_0	ı	(888)	-		4	J_C	}
	WWN	WWNa	WWWh		•		•			N W W	1414414
	THE NUMBER OF BLOCK	80000	00006	00002	0000/				THE NUMBER	OF BLOCK	00000
	TOP	l	0	8000	00000	****			TOP	LBA	<
	INNER	0	1	,	1				INNER	LUN	<u> </u>
	TARGET OUTER LUN COMBING INNER ID LUN INFORMATION LUN	2-1	1-1	2-2					TARGET OUTER LUN COMBING INNER	INFORMATION LUN	3-1
	OUTER LUN	0	0						OUTER	LUN	0
	TARGET ID	0	0	ı		16200			TARGET	<b>a</b>	0
	PORT TA	0	0	l					PORT	NUMBER	0

	Γ	T-			_		-	_	_		_
	PROPERTY	WWNs 6 IDs EVOLUERE	EACLUSIVE	WWNb S IDb EXCLISIVE	TATOTICE AT	WWNa S_IDa EXCLUSIVE		WWNa S_IDa EXCLUSIVE		•••	•
	WWN S_ID	S S	J_LLa	S. I.		S_IDa		S_IDa		***	
	WWN	WWWa	11 11 THE	WWN		WWNa		WWNa			•
	THE NUMBER OF BLOCK	80000	0000	00006		70000		100000			
	TOP	C	,	0		80000		150000		****	
	INNER	0		-		2		5			
	LUN COMBING INNER TOP THE NUMBER INFORMATION LUN LBA OF BLOCK	3-1		1-1		3-2		3-3			
	OUTER LUN	0		0		i		ı			
	TARGET OUTER ID LUN	0		0		1		1	'	***	
400	PORT TAI	0		0		!		I	•	•••	

111	PROPERTY	WWNa S_IDa EXCLUSIVE	WWNb S IDb EXCLUSIVE	WWNa S IDa EXCLUSIVE	WWNa S_IDa EXCLUSIVE	
	S_ID	S_IDa	S IDb	S Da	S_IDa	
	WWN S_ID	i	WWNb	WWNa	WWNa	(4 = 2 )
	THE NUMBER OF BLOCK	80000	00006	100000	70000	(===
	TOP	0	0	80000	180000	1820
	INNER	0	. 1	5	2	15202
	LUN COMBING INNER TOP THE NUMBER INFORMATION LUN LBA OF BLOCK	3-1	1-1	3-2	3-3	1===
		0	0	ı	1	
	TARGET OUTER ID LUN	0	0	Ì	I	1 4 4 4 4
	PORT TAI	0	0	1	I	

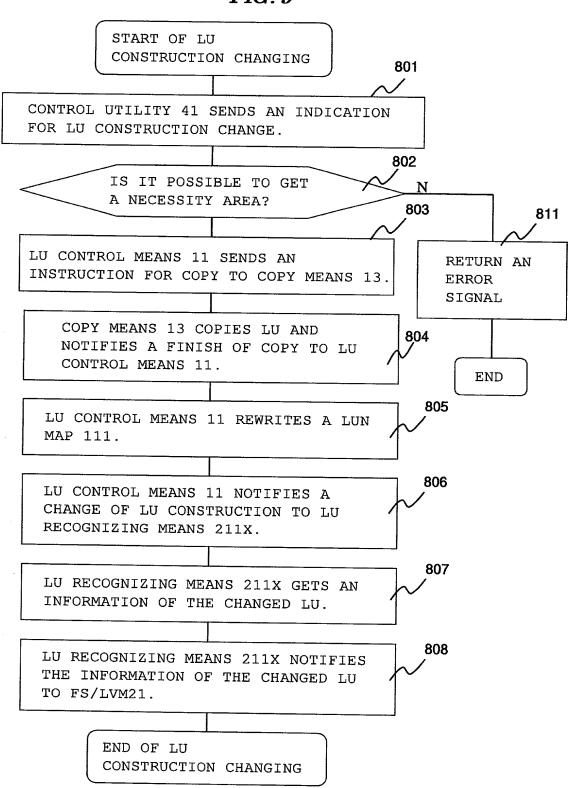
FIG. 6A

FIG. 8

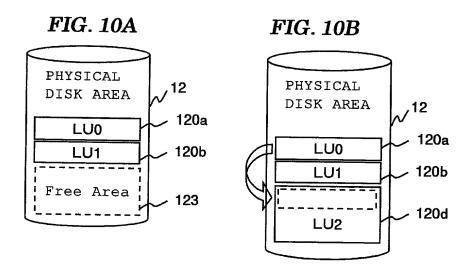


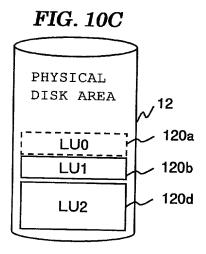
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## FIG. 9



Sheet 9 of 14





Atty Docket No. 16869N-029300 Applicant: Yoichi Mizuno, *et al.* 

Title: Computer System...
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	•

PORT TAF	TARGET	OUTER LUN	TARGET OUTER LUN COMBING INNER TOP THE NUMBER ID LUN INFORMATION LUN LBA OF BLOCK	INNER	TOP LBA	THE NUMBER OF BLOCK	WWN	S_ID	PROPERTY
0	0	0	1-1	0	0	80000	WWNa	S_IDa	WWNa S_IDa EXCLUSIVE
0	0	0	1-1		0	00006	WWNP	S_IDb	WWNb S_IDb EXCLUSIVE
ı	I	1	I	l	1	1		١	1
	********							*********	••••••

Robert C. Colwell, Reg. No. 2/,431

(050)

Atty Docket No. 16869N-029300 Applicant: Yoichi Mizuno, *et al.* Title: Computer System...

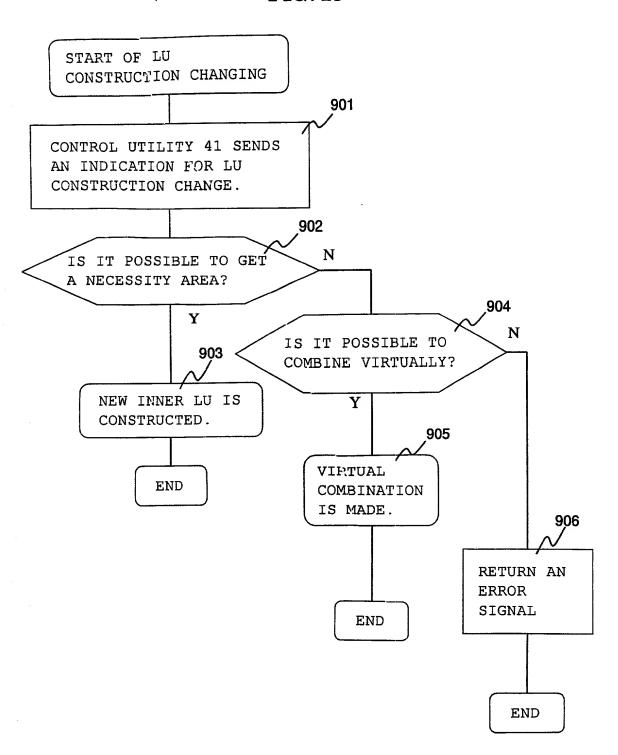
Sheet 11 of 14

FIG. 12

=

PROPERTY	Ι	EXCLUSIVE	EXCLUSIVE	•••••
S_ID	1	S_IDb	S_IDa	
WWN	I	WWNb S_IDb	WWNa	
THE NUMBER OF BLOCK	80000	00006	000081	•••••
TOP LBA	1	0	0	•••••
INNER	0	1	2	
LUN COMBING INNER TOP INFORMATION LUN LBA	1	1-1	1-1	••••••
OUTER LUN		0	0	
TARGET OUTER ID LUN	1	0	0	
PORT NUMBER	1	0	0	

FIG. 13



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FIG. 14A

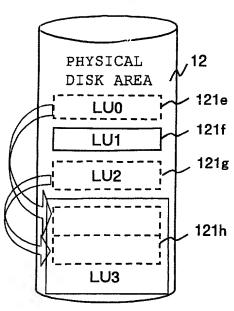
PHYSICAL DISK AREA 12

LU0 121e

LU1 121f

LU2 122

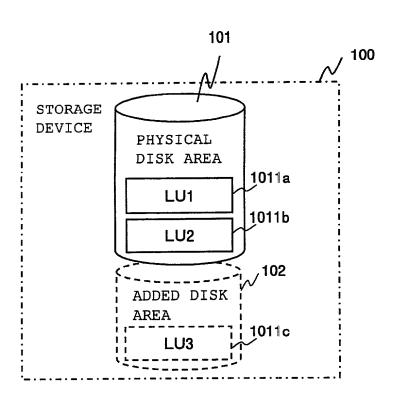
FIG. 14B



Robert C. Colwell, Reg. No. 27,431 (650) 326-240

Atty Docket No. 16869N-029300 Applicant: Yoichi Mizuno, et al. Title: Computer System... Sheet 14 of 14

FIG. 15

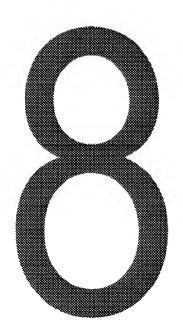


I,

# UNITED STATES PATENT AND TRADEMARK OFFICE DOCUMENT CLASSIFICATION BARCODE SHEET



# Oath/Declaration, Small Entity, and Power of Attorney



Level - 2 Version 1.1 Updated - 7/11/01

PTO/SB/106(8-96)

Approved for use through 9/30/98. OMB 0651-0032

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	COMPUTER SYSTEM
上記発明の明細書(下記の欄で×印がついていない場合は、 本書に添付)は、	The specification of which is attached hereto unless the following box is checked:
	was filed on as United States Application Number or PCT International Application Number and was amended on (if applicable).
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#### Page 1 of 4

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Prior Foreign Application(s)

外国での先行出願

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(Number)	(Country)
(番号)	(国名)
(Number) (番号)	(Country) (国名)

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(Application No.)	
(出願番号)	

(Filing Date) (出願日)

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(Application No.)	(Filing Date)
(出願番号)	(出願日)
(Application No.)	(Filing Date)
(出願番号)	(出願日)

私は、私自身の知識に基ずいて本宣言書中で私が行なう表 明が真実であり、かつ私の入手した情報と私の信じるところ に基ずく表明が全て真実であると信じていること、さらに故 意になされた虚偽の表明及びそれと同等の行為は米国法典第 18編第1001条に基ずき、罰金または拘禁、もしくはそ の両方により処罰されること、そしてそのような故意による 虚偽の声明を行なえば、出願した、又は既に許可された特許 の有効性が失われることを認識し、よってここに上記のごと く宣誓を致します。

I hereby claim foreign priority under Title 35, United States Code, Section 119 (a)-(d) or 365(b) of any foreign application(s) for patent or inventor's certificate, or 365(a) of any PCT international application which designated at least one country other than the United States, listed below and have also identified below, by checking the box, any foreign application for patent or inventor's certificate, or PCT International application having a filing date before that of the application on which priority is claimed. Priority Not Claimed

	優先権主張なし
7/ December/ 2000	_ 🗇
(Day/Month/Year Filed)	LJ
(出願年月日)	
(Day/Month/Year Filed)	
(出願年月日)	
(13/1/17/14/17)	

I hereby claim the benefit under Title 35, United States Code, Section 119(e) of any United States provisional application(s) listed

(Application	No.
(出願番号	<del>;</del> )

(Filing Date) (出願日)

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> (Status: Patented, Pending, Abandoned) (現況:特許許可済、係属中、放棄済)

(Status: Patented, Pending, Abandoned) (現況:特許許可済、係属中、放棄済)

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

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POWER OF ATTORNEY: As a named inventor, I hereby appoint the following attorney(s) and/or agent(s) to prosecute this application and transact all business in the Patent and Trademark Office connected therewith (list name and registration number)

Robert C. Colwell, Reg. No. 27,431;William L. Shaffer, Reg. No. 37,234;Paul A. Durdik, Reg. No. 37,819;Kim Kanzaki, Reg. No. 37,652 and George B.F. Yee, Reg. No. 37,478

書類送付先

Send Correspondence to:

Robert C. Colwell

TOWNSEND and TOWNSEND and CREW LLP

Two Embarcadero Center, 8<sup>th</sup> Floor San Francisco, California 94111-3834

直接電話連絡先: (氏名及び電話番号)

Direct Telephone Calls to: (name and telephone number)

Telephone: (650)326-2400 Fax: (650)326-2422

唯一または第一発明者		Full name of sole or first inventor Yoichi MIZUNO
発明者の署名	日付	Inventor's signature Date 46 ich Mizuno 5/28/01
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国籍		Citizenship
		Japan
私書箱		Post Office Address
		c/o Hitachi, Ltd., Intellectual Property Group
	New Marunouchi Bldg. 5-1, Marunouchi 1-chome,	
		Chiyoda-ku, Tokyo 100-8220, Japan

(第二以降の共同発明者についても同様に記載し、署名をすること)

(Supply similar information and signature for second and subsequent joint inventors.)

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第二共同発明者		Full name of second joint inventor, if any Naoto MATSUNAMI
第二共同発明者の署名	 日付	Second inventor's signature Date , , ,
		Marto Matsueram 5/28/01
 住所		Residence
		Miura, Japan
 国籍		Citizenship
		Japan
 私書箱		Post Office Address
		c/o Hitachi, Ltd., Intellectual Property Group
		New Marunouchi Bldg. 5-1, Marunouchi 1-chome,
		Chiyoda-ku, Tokyo 100-8220, Japan
————————— 第三共同発明者		Full name of third joint inventor, if any
		Kenji MURAOKA
第三共同発明者の署名	日付	Third inventor's signature Date
	, , , , ,	Kenji Muraoka 5/31/01
 住所		Residence
,		Odawara, Japan
		Citizenship
		Japan
 私書箱		Post Office Address
W E M		c/o Hitachi, Ltd., Intellectual Property Group
		New Marunouchi Bldg. 5-1, Marunouchi 1-chome,
		Chiyoda-ku, Tokyo 100-8220, Japan
第四共同発明者		Full name of fourth joint inventor, if any
<b>另</b> 四共四光明有		Yasuyuki MIMATSU
第四共同発明者の署名		Fourth inventor's signature Date
界四共同光明年の春石		yannung Mimatru 5/28/200
 住所		Residence
<b>压</b> 剂		Yokohama, Japan
国籍		Citizenship
四 木百		Japan
 私書箱		Post Office Address
松音相		c/o Hitachi, Ltd., Intellectual Property Group
		New Marunouchi Bldg. 5-1, Marunouchi 1-chome,
		Chiyoda-ku, Tokyo 100-8220, Japan
———————————————— 第五共同発明者		Full name of fifth joint inventor, if any
<b>为</b> 五六円元明有		ruii name oi mui joint inventor, ii any
第五共同発明者の署名	日付	Fifth inventor's signature Date
JA: ST		
住所		Residence
国籍		Citizenship
—————————————————————————————————————		Post Office Address
// E /H		1 Ost Office Address
	ついても同様に記載し、署名を	
こと)		subsequent joint inventors.)